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Dkt: P17412

Title: BUFFERING UNCHECKED STORES FOR FAULT DETECTION IN REDUNDANT MULTITHREADING SYSTEMS USING

SPECULATIVE MEMORY SUPPORT

REMARKS

Applicant respectfully requests reconsideration of this application in view of the following remarks and the above amendments. This response is believed to fully address all issues raised in the Office Action mailed December 18, 2009. Furthermore, no new matter is believed to have been introduced hereby.

Claims 11-13 and 15-18 remain pending as amended above.

Initially, rejection of claims 11-13 and 15 under 35 USC § 112, second paragraph, are believed to be moot in light of the above-detailed amendments. However, if any issues remain, Examiner Partridge is kindly requested to contact the undersigned attorney at 303-800-6678 to expedite prosecution of the present application.

35 USC 102 Rejection of the Claims

Claims 11-13 and 15-18 were rejected under 35 USC § 102(b) as being anticipated by Rotenberg ("AR-SMT: A Microarchitectural Approach to Fault Tolerance in Microprocessors").

Claims 11-13 and 15-18 were rejected under 35 USC § 102(b) as being anticipated by Reinhardt et al. ("Transient Fault Detection via Simultaneous Multithreading").

Initially, each of these rejections is respectfully traversed as the cited art, alone or in combination, fails to teach or even suggest the claimed combination of features such as set forth in any of the pending claims.

More particularly, the Action in part states:

the prior art is on an instruction by instruction basis. The problem is that the claims make not specific requirement of how the committing process occurs as at best it says "a single set of the exposed stores" but fails to define what a set is or any other aspect of the process. For that matter,

In response, in an effort to impart precision to the claims (e.g., by more particularly pointing out embodiments of the invention), and to expedite the prosecution of the present application, Applicant has amended independent claim 11 to in part recite that "committing one of the exposed stores atomically to a sequential architectural memory state of a computation

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corresponding to the dynamic sequential program". Support for this amendment may be readily found in the present specification, see, e.g., paragraphs 33, 37, and/or 39.

It is respectfully submitted that the cited art, alone or in combination, fails to teach (or even suggest) the claimed combination of features such as set forth in claim 11, including for example, committing one of the exposed stores atomically to a sequential architectural memory state of a computation corresponding to the dynamic sequential program. Accordingly, claim 11 is believed to be in condition for allowance.

The remaining independent claim recites similar (though not identical) language as claim 11 and has been rejected for similar reasons as claim 11. Hence, these remaining independent claim should be allowable for at least similar reasons as claim 11, as well as additional or alternative elements that are recited therein but not shown in the cited prior art.

Also, all pending dependent claims should be allowable for at least similar reasons as their respective independent claims, as well as additional or alternative elements that are recited therein but not shown in the cited prior art.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (303-800-6678) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 50-4238.

Respectfully submitted,

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By /Ramin Aghevli – Reg. No. 43,462/

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Date 5/18/10

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